

REMARKS**I. Status of Claims**

Claims 1-29 are pending based on election of group I claims in Applicants response to the Restriction Requirement dated March 30, 2005. Claim 21 is currently amended. Support for amended claim 21 can be found at least in paragraph [0031] and figure 5 of the current specification. Claims 1-29 are currently pending.

II. Rejection of Claims 21-29 Under 35 U.S.C. §112, second paragraph

Claims 21-29 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Amended claim 21 reads in part "wherein the probing tongue is moveable into the stack for creating an opening in a side of the stack for insertion of the lifting blade, said lifting blade is inserted into said stack by advancement of said lifting blade along said probing tongue." The present amendment clarifies claim 21 and renders the rejections under 112, second paragraph moot.

III. Rejection of Claims 1-29 Under 35 U.S.C 103(a) as Being Unpatentable Over Schmalz in View of Brinker and in Further View of Donner.

The present invention is directed to a depalletizing apparatus for separating and transporting a collection of stacked objects from a stack. The apparatus comprises a suction device assembly for lifting an edge portion of a stack of objects; a probing tongue for insertion into the stack below the suction device assembly; and a lifting blade for lifting the collection of stacked objects. The probing tongue and the lifting blade are distinct elements of the apparatus that perform distinct functions.

The present specification describes the probing tongue and lifting blade as two distinct elements, as exemplified in paragraphs [0022] and [0026] that read:

[0022] ... The depalletizing apparatus includes four components: a suction device assembly 10, a probing tongue 16, a lifting blade 19 and an optional compression arm assembly 21.

and

[0026] ... The arm 18 is moveable in a horizontal direction to move the probing tongue 16 forward and backward in relation to the tip 26 of the lifting blade 19. The lifting blade 19 is independently moveable from the probing tongue 16 in a horizontal direction.

It is evident that the probing tongue and the lifting blade are distinct components of the apparatus.

Furthermore, the probing tongue and the lifting blade perform distinct functions in the operation of the claimed apparatus. As stated in paragraph [0029] and [0031] that read:

[0029] ... The edge of the stacked product is lifted thereby lightening the load off the side of the stack and allowing the probing tongue 16 to be inserted into the stack proximate or juxtapose the slip sheet 4. In this manner, *the probing tongue 16 may be advanced from the slip sheet 4, or into opening 30, without damaging any of the stacked materials* since substantially all of the weight has been taken off the edge of the slip sheet by the suction device assembly 10. ...

and

[0031] ... The probing tongue 16 is moveable into the stack 1 for further opening the stack for insertion of the lifting blade 19 by the advancement of the lifting blade 19 ... against the probing tongue 16. ... The probing tongue is retracted allowing the lifted edge of the stacked product to settle down on the lifting blade.

Thus, in one aspect of the invention the probing tongue serves to designate a portion of the stack to be lifted and to minimize damage to the stack by guiding insertion of the lifting blade into the stack. Furthermore, the lifting blade is used to support the stack and for lifting the stack after the probing tongue is removed, whereas the probing tongue is used as separator and guide for

minimizing damage. The probing tongue and lifting blade are two distinct components of the apparatus that perform separate and distinct functions.

The present action rejects claims 1, 3-7, 9, 21, 23-27 and 29 under 35 U.S.C. §103(a) as being unpatentable over Schmalz *et al.* (US 6,652,014, "Schmalz") in view of Brinker *et al.* (US 5,102,292, "Brinker"); and claims 2, 8, 10-20, 22 and 28 as being unpatentable over Schmalz in view of Brinker in further view of Donner *et al.*, (US 6,332,750, "Donner"). The action characterizes Schmalz as disclosing all claimed features with the exception of describing the movement of stacked objects. The action also contends that Brinker provides a broad teaching of separating and transporting stacked objects. The action concludes that it would have been obvious to modify the teachings of Schmalz by including the separating and transportation of stacked objects described in Brinker. In addition, the action contends that claims 2, 8, 10-20, 22 and 28 would have been obvious by including the compression device as taught by Donner.

The action has failed to established a *prima facie* case of obviousness under 35 U.S.C. §103. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

A. Schmalz in view of Brinker does not teach all the elements of claims 1, 3-7, 9, 21, 23-27 and 29.

The prior art references taken alone or in combination fail to teach an apparatus with both a probing tongue and a lifting blade. The action, citing element 25b of FIG. 11 and FIG. 12, incorrectly interprets Schmalz as including a probing tongue. Element 25, referred to as an "undergripper" in the Schmalz reference, is defined in column 12 of the Schmalz reference that reads:

In order to lift the object, the vacuum grip system is maneuvered upward by use of the handling robot. The base unit of the vacuum grip system is affixed to (FIG. 8) or slidably engaged with (FIG. 6) a mechanical undergripper, which undergripper is at least partially movable under the lifted object. As soon as the undergripper is pushed under the lifted object, the object is set down on the undergripper. ... The suction units are relieved when *the object is set down on the mechanical undergripper*. The suction units now perform only a holding function; that is, they hold the object on the undergripper. (emphasis added and reference numerals removed)

The undergripper depicted in FIG. 11 and FIG. 12 does not include a probing tongue. Schmalz further describes the undergripper illustrated in FIG. 11 and FIG. 12 in column 13 as follows:

...the undergripper can also be constructed as a lattice grate that can be pushed together or pulled apart, or as a plate (see FIGS. 11 and 12) that is divided into at least two longitudinal partial plates that can be moved under, over or into one another. (reference numbers removed)

The undergripper as described by Schmalz is equivalent to an adjustable lifting plate.

In contrast to the undergripper illustrated in FIG. 11 and FIG. 12 and described in columns 12 and 13 of the Schmalz reference, the current application illustrates an example of a probing tongue in FIG. 5 and FIG. 6 and describes its function in paragraph [0031] of the present application. Paragraph [0031] states in part:

The probing tongue may be inserted in to the opening, or below the suction assembly device into the stacked product ... The probing tongue is moveable into the stack for further opening the stack for insertion of the lifting blade ... *The probing tongue is retracted*

allowing the lifted edge of the stacked product to settle down on the lifting blade. (emphasis added and reference numerals removed)

The probing tongue illustrated in FIG. 5 and FIG. 6 of the current application is not used to lift or support the stack, *i.e.*, as a lifting blade; whereas the undergripper illustrated in FIG. 11 and FIG. 12 of Schmalz is used as a lifting blade by supporting the object being manipulated. Thus, reference number 25b of Schmalz refers to a lateral extension of the lifting blade. The adjustable features of the undergripper or lifting blade described by Schmalz is used to broaden the surface area supporting the stack and in no way defines a probing a tongue. The undergripper as described in Schmalz is merely an adjustable lifting blade.

The rejections based on 35 U.S.C. §103 are not supported by the record due to the lack of teaching of all the limitations of the current claims by the cited references. Applicants request the withdrawal of the rejections and issuance of a notice of allowance.


B. Schmalz in view of Brinker and in further view of Donner does not teach all of the elements of claims 2, 8, 10-20, 22 and 28

Applicants incorporate the arguments set forth in section III(A) above and contend that the teaching of Donner does not remedy the deficiency of either Schmalz, Brinker, or the combination of Schmalz and Brinker. Donner describes the insertion of a lifting blade beneath the stack to be lifted and does not teach the use of a probing tongue to minimize damage that may result using just a lifting blade. Prior art references taken alone or in combination still fail to teach all elements of the claimed invention, particularly an apparatus having both a probing tongue and a lifting blade.

It is believed that no fee is due; however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason, the Commissioner is authorized to deduct said fees from Fulbright & Jaworski L.L.P. Account No.: 06-2375/P02764US0/10309582.

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Respectfully submitted,

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